

### **REMARKS/ARGUMENTS**

Claims 1-26 and 33-44 are pending in the present application. The above-noted office action recites that claims 1-26 and 32-44 are pending in the present application. We believe this to be an error as claim 32, among other claims, was cancelled in a preliminary amendment filed on October 27, 2004. Reconsideration of this Application and entry of this Amendment is respectfully requested for the following reasons.

#### **35 U.S.C. § 112 REJECTIONS**

Claims 1-26 and 33-44 have been rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicants regard as the invention. The Examiner states "[t]he recitation of highly cross-linked and extremely hydrophobic is vague and indefinite. What is highly cross-linked or how much cross-linked is highly cross-linked? What is extremely hydrophobic and how hydrophobic is the polyamine?"

Applicants refer the Examiner to page 21, paragraph 0048 of the specification, which states that "'highly cross-linked' is defined as a polymer substrate having an extensive network of primary chemical bonds linking the individual monomers together such that the polymer is essentially bound into a single molecule. This definition is not inconsistent with the general understanding of the term 'highly cross-linked'." Regarding the term "extremely hydrophobic", the specification states on page 17, paragraph 0039, that "...highly cross-linked, extremely hydrophobic polymers are defined as macromolecules composed of an indefinite number of monomers that are highly resistant to penetration by water and insoluble therein." On page 20, paragraph 0045, the specification states that these polymers are made from suitable hydrophobic monomers. Accordingly, claims 1-26 and 33-44 are believed to be definite and in condition for allowance.

The Examiner also states that, "[c]laim 33 does not recite method steps and thus no active steps are present in [sic] treatment method" and also that "[i]t is not clear in claim 34 how the blood coagulation is prevented." Claims 33 and 34 have been slightly amended and are now believed to be definite and in condition for allowance.

### 35 U.S.C. §102 REJECTIONS

Claims 1, 2, 5 and 23-26 have been rejected under 35 U.S.C. §102(b) as being anticipated by Pulfer et al. (Incorporation of Nitric Oxide-Releasing Crosslinked Polyethyleneimine Microspheres Into Vascular Grafts; Journal of Biomedical Material Research; Wiley, New York, NY, Vol. 37, No. 2, November 1997; pp182-189), hereinafter Pulfer or Pulfer et al. Claim 1 defines highly cross-linked, extremely hydrophobic nitric oxide-releasing biocompatible polydiazoniumdiolated polyamine-functionalized polymers. The prior art of record does not teach or suggest the above-noted features of claim 1. More specifically, the Pulfer reference does not teach or suggest a highly cross-linked, extremely hydrophobic nitric-oxide releasing polymer, let alone highly cross-linked, extremely hydrophobic nitric oxide-releasing biocompatible polydiazoniumdiolated polyamine-functionalized polymers. Rather, according to the Examiner, "Pulfer discloses cross-linked polyethyleneimine microspheres that are derivatized with Nonates and the NO-releasing microspheres are incorporated into the pores of the vascular graft (right column of page 187)." To anticipate a claim, the reference must teach every element of the claim. M.P.E.P. §2131. The Pulfer et al reference does not teach every element of claim 1. Accordingly, claim 1 is in condition for allowance.

Claims 2 and 5 ultimately depend from claim 1, and since claim 1 defines patentable subject matter, claims 2 and 5 define patentable subject matter. Furthermore, the prior art of record does not teach or suggest highly cross-linked, extremely hydrophobic nitric oxide-releasing biocompatible polydiazoniumdiolated polyamine-functionalized polymers, wherein the polymer forms micro-beads (claim 2) or highly cross-linked, extremely hydrophobic nitric oxide-releasing biocompatible polydiazoniumdiolated polyamine-functionalized polymers, wherein the micro-beads have pores (claim 5). Accordingly, claims 2 and 5 are in condition for allowance.

Claims 23-26 require at least a highly cross-linked, extremely hydrophobic nitric oxide-releasing biocompatible polymer. The prior art of record does not teach or suggest the above-noted features of claim 23-26. To anticipate a claim, the reference

must teach every element of the claim. M.P.E.P. §2131. The Pulfer et al reference does not teach every element of claims 23-26. Accordingly, claim 23-26 are in condition for allowance.

### 35 U.S.C. § 103 REJECTIONS

Claims 3, 4, 7, 8, 14-22, and 33-44 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Pulfer et al. In order to establish a prima facie case of obviousness, three basic criteria must be met, according to the Manual of Patenting Examining Procedure, §706.02(j). These three are repeated as follows. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Third, the prior art reference must teach or suggest all the claim limitations. Applicants submit that the Examiner has not established a prima facie case of obviousness for rejecting claims 3, 4, 7, 8, 14-22 and 33-44.

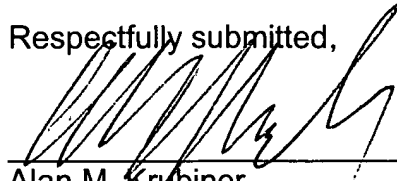
In regard to the first criterion of obviousness, there is no suggestion in the reference itself, or in the knowledge generally available to one of ordinary skill in the art, to modify the reference. According to the Examiner, the Pulfer et al. reference discloses a "cross-linked nitric oxide releasing polymamine-functionalized polymer." Even assuming this is correct, the Pulfer et al. reference does suggest a highly cross-linked, extremely hydrophobic nitric-oxide releasing polymer. Accordingly, there is no suggestion or motivation either in the prior art reference itself or in the knowledge generally available to one of ordinary skill in the art to modify the reference.

In regard to the third criterion of obviousness, the prior art reference does not teach or suggest all the claim limitations. Clearly, the Pulfer et al. reference does not teach or suggest highly cross-linked, extremely hydrophobic nitric oxide-releasing polymers. Accordingly, claims 3, 4, 7, 8, 14-22, and 33-44 are believed to be in condition for allowance.

**Conclusion**

For the foregoing reasons, Applicant believes all the pending claims are in condition for allowance and should be passed to issue. If the Examiner feels that a telephone conference would in any way expedite the prosecution of the application, please do not hesitate to call the undersigned at telephone (707) 543-5021.

Respectfully submitted,



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